

CLAIMS

What is claimed is:

1. A cargo restraining brace comprising:

A. a fork-shaped portion defined by two parallel, spaced apart legs extending
5 perpendicularly from a cross-member; and

B. a locking portion extending from said cross-member in a direction substantially opposite
said parallel legs, said locking portion comprising a telescoping locking leg and an adjustment
mechanism.

10 2. The cargo restraining brace of Claim 1, wherein each leg is comprised of a first tube axially
nested inside a second tube such that said tubes are capable of telescoping movement relative
to one another.

15 3. The cargo restraining brace of Claim 1, wherein each leg is further defined by a distal end
and a proximal end and a shaft perpendicularly extending from the proximal end of said leg.

4. The cargo restraining brace of Claim 3, wherein said perpendicularly extending shaft is
provided with a plurality of adjustment elements along at least a portion of its length.

5. The cargo restraining brace of Claim 4, wherein said adjustment elements are apertures.

6. The cargo restraining brace of Claim 4, wherein said adjustment elements are teeth.

20 7. The cargo restraining brace of Claim 4, wherein said adjustment elements are threads.

8. The cargo restraining brace of Claim 3, wherein said leg further comprises a securing foot
attached to the distal end of each leg.

25 9. The cargo restraining brace of Claim 8, wherein each securing foot comprises a rigid plate
perpendicularly attached to said leg and an outwardly facing friction pad mounted on said
rigid plate.

10. The cargo restraining brace of Claim 9, wherein said friction pad is rubber.
11. The cargo restraining brace of Claim 3, wherein said cross-member is defined by opposite, open ends each of which is disposed to slidingly receive an end of said shaft of said leg.
12. The cargo restraining brace of Claim 11, wherein said cross-member open ends are provided with a plurality of adjustment elements that correspond with the adjustment elements of the shaft of said leg.
13. The cargo restraining brace of Claim 12, wherein said adjustment elements are apertures.
14. The cargo restraining brace of Claim 12, wherein said adjustment elements are threads.
15. The cargo restraining brace of Claim 11, further comprising a locking mechanism to secure said shaft of said leg to said cross-member and adjustment elements.
16. The cargo restraining brace of Claim 15, wherein said locking mechanism is a spring loaded pin.
17. The cargo restraining brace of Claim 15, wherein said adjustment elements are apertures and said locking mechanism is a spring loaded pin that seats in said apertures.
18. The cargo restraining brace of Claim 15, wherein said adjustment elements are teeth and said locking mechanism is a ratchet that engages said teeth.
19. The cargo restraining brace of Claim 2, wherein a first tube of a parallel leg is provided with a plurality of adjustment elements along at least a portion of its length.
20. The cargo restraining brace of Claim 19, wherein said adjustment elements are apertures.
21. The cargo restraining brace of Claim 19, wherein said adjustment elements are teeth.
22. The cargo restraining brace of Claim 19, wherein said adjustment elements are threads.
23. The cargo restraining brace of Claim 2, further comprising a locking mechanism to secure said first and second tubes of said parallel leg to one another.

24. The cargo restraining brace of Claim 19, wherein said adjustment elements are apertures and further comprising a spring loaded pin that seats in said apertures.
25. The cargo restraining brace of Claim 19, wherein said adjustment elements are teeth and further comprising a ratchet that engages said teeth.
- 5 26. The cargo restraining brace of Claim 1, wherein said telescoping locking leg is comprised of a first tube axially nested inside a second tube such that said tubes are capable of telescoping movement relative to one another.
27. The cargo restraining brace of Claim 26, wherein said locking leg is further defined by a distal end and a proximal end and said locking leg is attached to said cross-member at said proximal end of said locking leg.
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28. The cargo restraining brace of Claim 26, wherein said first tube of said locking leg is provided with a plurality of adjustment elements along at least a portion of its length.
29. The cargo restraining brace of Claim 28, wherein said adjustment elements are apertures.
30. The cargo restraining brace of Claim 28, wherein said adjustment elements are teeth.
- 15 31. The cargo restraining brace of Claim 28, wherein said adjustment elements are threads.
32. The cargo restraining brace of Claim 27, wherein said locking leg further comprises a securing foot attached to the distal end of said leg.
33. The cargo restraining brace of Claim 32, wherein said securing foot comprises a rigid plate perpendicularly attached to said locking leg and an outwardly facing friction pad mounted on said rigid plate.
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34. The cargo restraining brace of Claim 33, wherein said friction pad is rubber.
35. The cargo restraining brace of Claim 26, further comprising a locking mechanism to secure said first and second locking leg tubes to one another.

36. The cargo restraining brace of Claim 26, wherein said adjustment elements are apertures and further comprising a spring loaded pin that seats in said apertures.
37. The cargo restraining brace of Claim 26, wherein said adjustment elements are teeth and further comprising a ratchet that engages said teeth.
- 5 38. The cargo restraining brace of Claim 1 further comprising a biasing mechanism in at least one of said legs to urge said leg outward.
39. The cargo restraining brace of Claim 1 further comprising an attachment anchor on each of said parallel legs.
- 10 40. The cargo restraining brace of Claim 40 further comprising a securing element secured between said attachment anchors.
41. The cargo restraining brace of Claim 40 wherein said securing element is a flexible strap.
42. The cargo restraining brace of Claim 40 wherein said securing element is a bar.
43. The cargo restraining brace of Claim 2 further comprising an additional cross-member extending between said parallel legs, said additional cross member capable of being secured selectively along the length of said parallel legs.
- 15 44. The cargo restraining brace of Claim 43 wherein said additional cross member is secured between the first tubes of said parallel legs.
45. A cargo restraining brace comprising:
- 20 A. three telescoping legs, each leg having a first tube axially nested inside a second tube such that said tubes are capable of telescoping movement relative to one another;
- B. a first cross-member defined by first and second ends, wherein a first telescoping leg is perpendicularly attached to said cross member at a point between said ends and wherein each end of said cross member has a telescoping leg telescopingly attached perpendicularly thereto

such that said legs extend perpendicularly from said cross member and parallel with one another;
and

C. a locking mechanism to secure said first and second tubes of a leg to one another.

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46. The cargo restraining brace of Claim 45, wherein said first tube of said leg is provided with a plurality of adjustment elements along at least a portion of its length.

47. The cargo restraining brace of Claim 46, wherein said adjustment elements are apertures.

48. The cargo restraining brace of Claim 46, wherein said adjustment elements are teeth.

10 49. The cargo restraining brace of Claim 46, wherein said adjustment elements are threads.

50. The cargo restraining brace of Claim 46, wherein said adjustment elements are apertures and further comprising a spring loaded pin that seats in said apertures.

51. The cargo restraining brace of Claim 46, wherein said adjustment elements are teeth and further comprising a ratchet that engages said teeth.

15 52. The cargo restraining brace of Claim 45 further comprising a biasing mechanism in at least one of said legs to urge said leg outward.

53. The cargo restraining brace of Claim 45 further comprising an additional cross-member extending between said parallel legs, said additional cross member capable of being secured selectively along the length of said parallel legs.

20 54. The cargo restraining brace of Claim 53 wherein said additional cross member is secured between the first tubes of said parallel legs.

55. A cargo restraining brace comprising:

A. no more than three telescoping legs, each leg having a first tube axially nested inside a second tube such that said tubes are capable of telescoping movement relative to one another;

B. a first cross-member defined by first and second ends, wherein a first telescoping leg is perpendicularly attached to said cross member at a point between said ends and wherein each end of said cross member has a telescoping leg telescopingly attached perpendicularly thereto such that said legs extend perpendicularly from said cross member and parallel with one another;

5 and

C. a locking mechanism to secure said first and second tubes of a leg to one another.